

AMENDMENTS TO THE CLAIMS

1. (Original) An apparatus for wirelessly communicating with at least one mobile unit within a wireless local area network, wherein the wireless local area network communicates with an external, wired, computer network, the apparatus comprising:

a base module positioned within a stack, wherein the stack forms a node within the wireless local area network;

an antenna module positioned within the stack;

at least a first wireless module positioned within the stack and coupled to the base and antenna modules;

wherein at least the first wireless module is configured to perform automatic self-discovery, wherein performing automatic self-discovery includes:

automatically determining a position of the wireless module within the stack;

automatically identifying other modules in the stack; and,

automatically determining whether the node is coupled to communicate with the external, wired, computer network via a wired or wireless communication link.

2. (Original) The apparatus of claim 1 wherein the first wireless module periodically performs automatic self-discovery, and

wherein determining whether the node is coupled to communicate with the computer network includes determining whether Dynamic Host Configuration Protocol (DHCP) was received wirelessly or via a wired Ethernet connection.

3. (Original) The apparatus of claim 1 wherein the first wireless module includes a finite state machine to perform automatic self-discovery.

4. (Original) The apparatus of claim 1, further comprising a second wireless module positioned within the stack and coupled to the base and antenna modules, wherein the second module is configured to perform automatic self-discovery, and wherein the first and second wireless modules each implement a different IEEE 802-type wireless protocol.

5. (Original) The apparatus of claim 1 wherein performing automatic self-discovery includes automatically determining whether the apparatus is an access point or a backhaul for the wireless local area network, and

wherein determining whether the node is coupled to communicate with the computer network includes determining whether a network address was received via a wired or wireless connection.

6-27. (Cancelled)

28. (New) A method for wirelessly communicating with at least one mobile unit within a wireless local area network, wherein the wireless local area network communicates with an external, wired, computer network, the method comprising:

providing a base module portion positioned within a stack, wherein the stack forms a node within the wireless local area network;

providing an antenna module positioned within the stack;

providing at least a first wireless module positioned within the stack and for coupling to the base and antenna modules;

performing automatic self-discovery via at least the first wireless module, wherein performing automatic self-discovery includes:

automatically determining a position of the wireless module within the stack;
automatically identifying other modules in the stack; and,
automatically determining whether the node is coupled to communicate with the external, wired, computer network via a wired or wireless communication link.

29. (New) The method of claim 28 wherein the first wireless module periodically performs automatic self-discovery, and

wherein determining whether the node is coupled to communicate with the computer network includes determining whether Dynamic Host Configuration Protocol (DHCP) was received wirelessly or via a wired Ethernet connection.

30. (New) The method of claim 28 wherein the first wireless module includes a finite state machine to perform automatic self-discovery.

31. (New) The method of claim 28, further comprising providing a second wireless module positioned within the stack and coupled to the base and antenna modules, wherein the second module is configured to perform automatic self-discovery, and wherein the first and second wireless modules each implement a different IEEE 802-type wireless protocol.

32. (New) The method of claim 28 wherein performing automatic self-discovery includes automatically determining whether the apparatus is an access point or a backhaul for the wireless local area network, and

wherein determining whether the node is coupled to communicate with the computer network includes determining whether a network address was received via a wired or wireless connection.

33. (New) An apparatus for wirelessly communicating with at least one mobile unit within a wireless local area network, wherein the wireless local area network communicates with an external, wired, computer network, the apparatus comprising:

base module means positioned within a stack, wherein the stack forms a node within the wireless local area network;

antenna module means positioned within the stack;

at least a first wireless module means, positioned within the stack, for coupling to the base module means and antenna module means;

means for performing automatic self-discovery, wherein the means for performing automatic self-discovery includes:

means for automatically determining a position of the wireless module within the stack;

means for automatically identifying other modules in the stack; and,

means for automatically determining whether the node is coupled to communicate with the external, wired, computer network via a wired or wireless communication link.

34. (New) The apparatus of claim 33 wherein the first wireless module means periodically performs automatic self-discovery, and

wherein the means for automatically determining whether the node is coupled to communicate with the computer network includes means for determining whether Dynamic Host Configuration Protocol (DHCP) was received wirelessly or via a wired Ethernet connection.

35. (New) The apparatus of claim 33 wherein the first wireless module means includes a finite state machine to perform automatic self-discovery.

36. (New) The apparatus of claim 33, further comprising a second wireless module means, positioned within the stack, for coupling to the base module means and

antenna module means, wherein the second module means is configured to perform automatic self-discovery, and wherein the first and second wireless module means each implement a different IEEE 802-type wireless protocol.

37. (New) The apparatus of claim 33 wherein the means for performing automatic self-discovery includes means for automatically determining whether the apparatus is an access point or a backhaul for the wireless local area network, and

wherein the means for automatically determining whether the node is coupled to communicate with the computer network includes means for determining whether a network address was received via a wired or wireless connection.